

PROBLEM SHEET 5

ANSWERS

1. 68 V; 48 V
2. a) 121 V; b)  $9.5^\circ$  leading
3. a) 72 V; b)  $25^\circ$ ; c)  $-65^\circ$ ;
4. a) 6.2 A; b) 196 V; c) 156 V; d)  $51^\circ$
5. a) 25  $\Omega$ ; b) 29  $\Omega$ ; c) 8.2 A; d)  $59^\circ$  lagging
6. a) 145  $\Omega$ ; b) 170  $\Omega$ ; c) 1.4 A; d)  $58^\circ$  leading
7. a) 19  $\Omega$ ; b) 5.2 A; c) 62 V, 243 V, 164 V; d)  $52^\circ$
8. Assignment
9. Assignment
10. 11 A;  $8.5^\circ$  lagging